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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,945	03/31/2004	Gilles Grandpierre	251318US6	4929
22850 7590 12/22/2006 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER PRICE, CARL D	
			ART UNIT	PAPER NUMBER
			3749	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/22/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/812,945

Applicant(s)

GRANDPIERRE, GILLES

Examiner

CARL D. PRICE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-7, 10, 12, 13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 10, 12, 13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Response to Arguments

Applicant's arguments with respect to claims 1, 3-7, 10, 12, 13 and 15-20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant has amended the claims to be of a scope not previously considered. Consistent with applicant's argument that the prior art relied on in the previous office action fail to show, disclose and/or teach certain aspects of applicant's invention now recited in the claims filed on 09/11/2006, applicant has amended the claims to include for example at least the following:

(Claim 1)

A glass-ceramic plate comprising at least one opening located within a bent portion of said plate, said opening being at a location other than a heating area and having an angular or polygon shape,

wherein an outer peripheral edge around said opening is bent upwards, and wherein said opening is a suction hood opening configured for use with a suction hood for allowing for the extraction of cooking gases.

(Highlighting and Underlining Added)

With regard to the recitation "*and having an angular or polygon shape*" applicant asserts the following:

"The Official Action suggests that the shape of the opening would have been an obvious matter of design choice for one of ordinary skill in the art at the time of the invention. However, the Applicant respectfully disagrees with this assumption. As is discussed in detail in the specification of the present application, at the time of the invention, it was assumed that such shapes could not be used due to negative repercussions. As noted in the paragraph beginning on line 30 of page 3, there was a negative a priori to make an opening in combination with a deformation as large as that recited in Claim 5, in particular through fear of ceramification problems or problems having repercussions as regards the flatness of the plate or its strength characteristics. Also, as noted in the paragraph beginning on line 3 of page 4, there was a negative a priori about obtaining an opening with a deformation having a polygonal or angular shape, or complex shape with a regular and satisfactory appearance, in particular at the comers. Thus, one of skill in the art would not have considered such shapes to be an obvious matter of design choice at the time of the invention."

Pages 3-4 of applicant's original disclosure recite the following:

In a second embodiment of the invention, at least one dimension of the opening (width, length, diameter, etc.) is greater than 10 cm, or even at least one dimension is greater than 20 cm or, where appropriate, the width and the length of the opening are greater than 10 cm. There was a negative a priori to make an opening in combination with a deformation as large as this for the abovementioned reasons, in particular through fear of ceramification problems or problems having repercussions as regards the flatness of the plate or its strength characteristics. The present invention, in conjunction with the processes described later, demonstrates that none of this is so, the departure from flatness obtained (apart from the desired deformations) notably not exceeding 0.2 mm on plates according to the invention.

(Highlighting and Underlining Added)

The examiner disagrees with applicant's conclusion that one of skill in the art would not have considered such shapes to be an obvious matter of design choice at the time of the invention based on applicant's disclosure indicating "it was assumed that such shapes could not be used due to negative repercussions". That is, "through fear of ceramification problems or problems having repercussions as regards the flatness of the plate or its strength characteristics". It is noted that these portions of the specification referenced by applicant relate only to the specifics arrangement and combination of relative dimensions associated with a "second embodiment" where "at least one dimension of the opening (width, length, diameter, etc.) is greater than 10 cm, or even at least one dimension is greater than 20 cm or, where appropriate, the width and the length of the opening are greater than 10 cm. ... in conjunction with the processes described later, demonstrates that none of this is so, the departure from flatness obtained (apart from the desired deformations) notably not exceeding 0.2 mm on plates according to the invention." In this regard applicant is reminded that the claims (e.g. – claim 1) are directed to a "glass-ceramic plate" having no particular specified dimension, shape or design constraints other than an opening of the glass plate having an "angular or polygon" shape and upwardly bent outer peripheral edge. Nor, is the glass-ceramic plate claimed in "conjunction" with a process for making the plate. Even if this were the case applicant is reminded that the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Notwithstanding applicant remarks and arguments the prior art reference of US006182472 (Fredholm et al; Assignee Eurokera) is now relied on to address the scope of the claimed invention now set forth in the amended claims. In this regard US006182472 (Fredholm et al) discloses the following:

“9) Thus, large quantities of plane electric hob plates are made out of glass-ceramic. These plates are initially made out of a plate of glass that is a precursor for glass-ceramic, and then they are cerammed.”

“(10) Such plane plates of glass-ceramic are also made for gas cookers or for combined hobs: in particular combined gas-and-electricity hobs. It is necessary to provide openings or holes through the thickness of that type of plate through which the atmospheric gas burners are passed. These openings are provided of a diameter that is sufficiently large relative to the diameter of the burners concerned to avoid force being used during assembly, and thus to avoid the risk of breaking the plate. Said diameter generally lies in the range 40 mm to 95 mm. Similarly, smaller openings may be provided in that type of plate, in particular for receiving control knobs.”

“(21) Said method of the invention--a method of bending the perimeter of at least one opening formed through a glass-ceramic precursor plate, said perimeter describing a closed curve without sharp angles-- ...”

“(5) The shape of the opening whose perimeter the invention seeks to bend is described below. In general the opening is circular in section, but that is not essential in any way. Said section can be elliptical, oval, or arbitrary. In any event, the perimeter of the opening is described by a closed curve without any sharp or brittle angles.”

“(16) Proposals have also made to bend upwards the perimeters of the openings. The slope thus established around the opening makes it possible to prevent liquids infiltrating beneath the plate, with the liquids flowing down the slope. Openings with perimeters bent in this way--said perimeter being in particular substantially in the form of a truncated cone--are disclosed in patent U.S. Pat. No. 5,549,100. The method implemented for performing that bending is not described in detail. It makes use of a vacuum during the cycle in which the glass is cerammed. In as yet unpublished patent application FR 97/06114, the Applicant has described glass-ceramic plates with at least one opening at the top of a local bending in the plate; at least a portion of the perimeter of said opening being shaped mechanically. The perimeter of the opening is bent during the ceramming cycle and the mechanical shaping of said perimeter advantageously takes place prior to said ceramming cycle.”

“(19) With reference to the problems explained above specific to plates having openings, in a first aspect, the present invention proposes a method of bending the perimeters of openings in a glass-ceramic precursor plate (local bending seeking to raise said perimeter), which method is of the type described in application FR-A-2 726 350. Surprisingly, the Applicant has found that the "folding" method of FR-A-2 726 350 can be adapted to bending the perimeter of an opening that describes a closed curve without sharp angles. This is really surprising insofar as the person skilled in the art would have expected to be faced with problems of breakage, of

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weakening of the glass plate constituting a precursor and/or of the resulting glass-ceramic plate, given the high levels of tension generated in the bent area.”

“(17) In principle, the bending of the perimeter of an opening that has been heated to an appropriate temperature is thus implemented using a stamp-type tool disposed on one side of the plate or with two stamp type tools disposed on both sides of the plate. Naturally, the operative section of such a tool is matched appropriately, being of an area greater than that of the opening whose perimeter is to be bent, and generally slightly greater insofar as the bending is, in principle, not applied to a large width (assuming that the tools are solid). “

(Highlighting and Underlining Added)

Contrary to applicant's assumption that forming shapes such as those intended by the present application “could not be used due to negative repercussions”, US006182472 (Fredholm et al) has disclosed and therefore teaches that at the time of the invention that it is known to form circular, elliptical, oval, or arbitrary shaped openings in glass-ceramic gas cookers or for combined hobs wherein the perimeter of the opening is bent into a raised or sloped configuration to prevent liquids infiltrating beneath the plate, with the liquids flowing down the slope, indeed even though “the person skilled in the art would have expected to be faced with problems of breakage, of weakening”. Therefore, in view of the teaching of US006182472 (Fredholm et al), it would have been obvious to a person having ordinary skill in the art to form cook top or stove tops with openings having angularly or polygonal and/or complex shapes requiring a sloped perimeter from glass-ceramic material, for ease with which they can be cleaned.

### Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, with regard to the recitation “having an angular or polygon and/or complex”, the 1) angular and complex; 2) polygon and complex; and 3) complex shaped arrangements must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 5 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. This is not the case with the recitations "angular or polygonal" (claim 1), "having at least one dimension greater than 10 cm and/or and having an angular or polygon and/or complex" (claim 5) and "A cooking and/or high-temperature-maintaining device" (claim 10) since it is unclear what, if any distinction should be made between the terms. That is, since applicant provides no description or representation of the it is unclear how, for example, the claimed "angular" shape necessarily differs from the "polygonal" shape, and how each of these might necessarily differ from or are distinguishable from a "complex" shape. Is applicant merely attempting to claim the opening being of a non-circular shape? Likewise, the invention having been disclosed as a cooking device, it is unclear what structure necessarily constitutes a " high-temperature-maintaining device", and how this device necessarily differs from a "cooking device". For these reasons the alternative expressions create uncertainty and ambiguity with respect to the question of scope or clarity of the claims.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

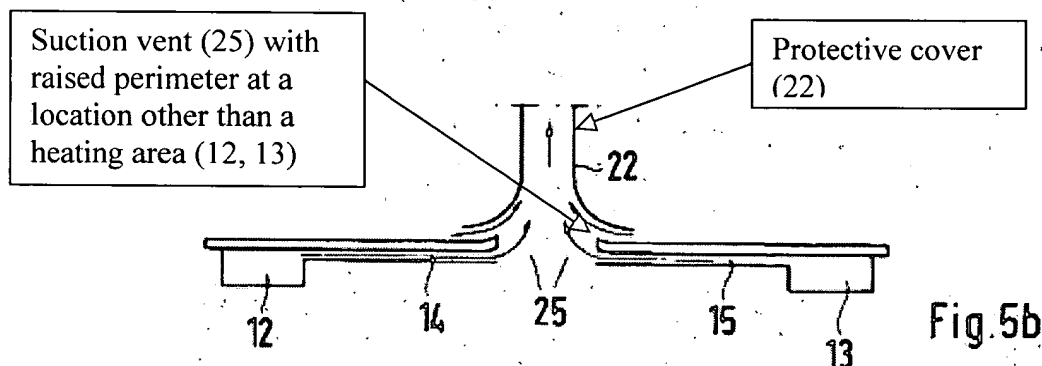
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims Rejected under 35 U.S.C. 103(a)**

Claims 1, 3-7, 10, 12, 13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE0010037813 (newly cited), JP60-144530 (newly cited) or JP11-46992 (newly cited) in view of US006182472 (Fredholm et al; Assignee Eurokera).

DE0010037813 shows and disclose (See the English language abstract) a glass-ceramic stove top plate (1) comprising at least one opening (25) located within a bent portion of said plate, said opening being at a location other than a heating area and having an outer peripheral edge thereof bent upwards, and wherein said opening is a suction hood opening configured for use with a suction hood for allowing for the extraction of cooking gases. The central opening has a protective cover which, at least to some degree, prevents objects passing into the opening during operation.

In this regard DE0010037813 shows the following:





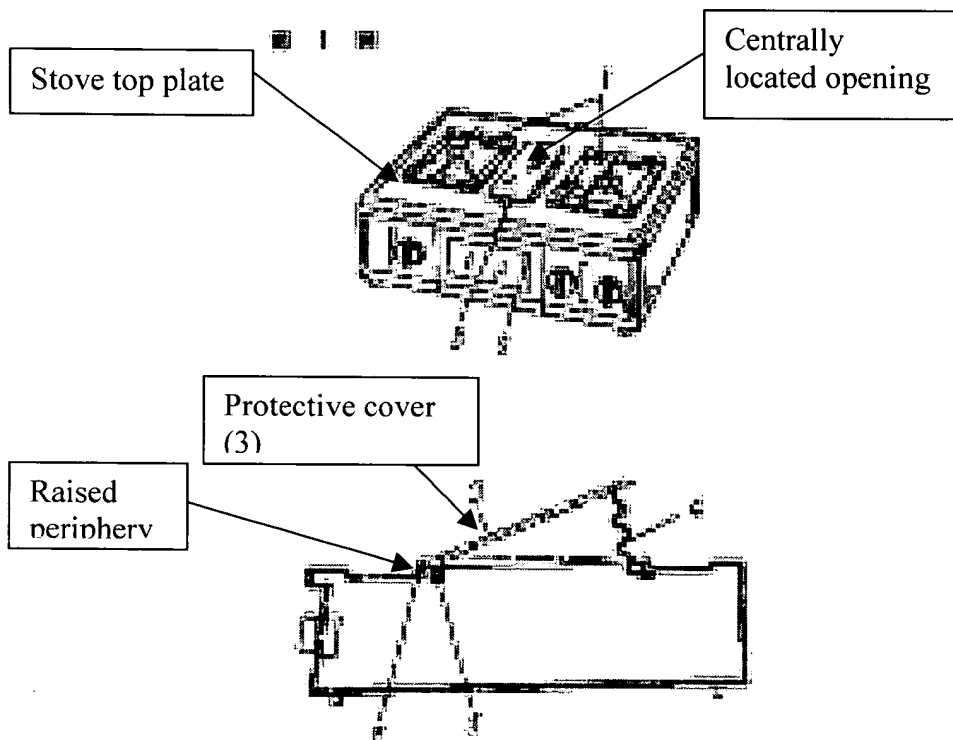
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**DE0010037813** shows and discloses the invention substantially as set forth in the claims with possible exception to:

- one opening having an angular or polygon shape.

**JP60-144530** shows and disclose (See the English language abstract) a stove top plate (1) comprising at least one opening (6) located within a bent portion of said plate, said opening being at a location other than a heating area (1) and having an angular or polygon shape with an outer peripheral edge thereof bent upwards. The central opening has a protective cover which, at least to some degree, prevents objects passing into the opening during operation.

In this regard **JP60-144530** shows the following:



**JP11-46992** shows and disclose (See the English language abstract) a stove top plate (1) comprising at least one central opening (4) located within a bent portion of said plate, said opening being at a location other than a heating area (14) and having an outer peripheral edge

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thereof bent or raised upwards, and wherein said opening is a suction hood opening communicating with a suction chamber (5) located below the plate, for allowing for the extraction of cooking gases. The central opening has an apertured and/or screened (see filter 15) protective cover (18), alternatively separately or integrally formed with the plate, which prevents objects passing into the opening during operation.

US006182472 (**Fredholm et al**) teaches, from applicant's same glass-ceramic stove top field of endeavor, that at the time of the invention that it is known to form circular, elliptical, oval, or arbitrary shaped openings in glass-ceramic gas cookers wherein the perimeter of the opening is bent into a raised or sloped configuration to prevent liquids infiltrating beneath the plate, with the liquids flowing down the slope. Note the discussion of US006182472 (**Fredholm et al**) appearing herein above.

In regard to claims 1, 3-5, 7, 10, 13 and 15-18, for the purpose of providing a suitable or desired shaped according to a given stove top operational or aesthetic design parameters, it would have been obvious to a person having ordinary skill in the art to form the DE0010037813 cook top with an opening having complex or "arbitrary" shape, in view of the teaching of US006182472 (**Fredholm et al**), and in view of the teaching of JP60-144530 an angular or polygon shape.

Alternatively, in regard to claims 1, 3-5, 7, 10, 13 and 15-18, it would have been obvious to a person having ordinary skill in the art to form the entire stove top plate of JP60-144530 from a single glass-ceramic material, in view of the teaching of US006182472 (**Fredholm et al**) or DE0010037813.

And, as a further alternative, in regard to claims 1, 3-7, 10, 12, 13 and 15-18, for the purpose of for the purpose of providing a suitable or desired shaped according to a given stove top operational or aesthetic design parameters, it would have been obvious to a person having ordinary skill in the art to form the stove top of JP11-46992 with an opening having complex or "arbitrary" shape, in view of the teaching of US006182472 (**Fredholm et al**), and in view of the teaching of JP60-144530 an angular or polygon shape. Furthermore, it would have been obvious to a person having ordinary skill in the art to form the entire stove top plate of JP11-46992 from

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a single glass-ceramic material, in view of the teaching of US006182472 (Fredholm et al) or DE0010037813. In regard to claim 12, in particular, the porous member (15) of JP11-46992, shown as an intermeshed fibrous porous member, is deemed the structural and functional equivalent to applicant's broadly claimed mesh element.

In regard to claims 3, 5, 15 and 16, since the size and dimensions of stove top openings would necessarily depend on numerous design concerns such as the overall size and shape of the stove top plate, the relative position of any heating elements associated with the top plate, the desired flow of gases through the opening, to form the opening to have the dimensions set forth in applicant's claims can be viewed as nothing more than merely a matter of choice in design, absent the showing of any new or unexpected results produced therefrom over the prior art of record.

In regard to claim 1, the recitation "wherein said opening is a suction hood opening configured for use with a suction hood for allowing for the extraction of cooking gases", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this regard, as evidenced by the suction device (22) of DE0010037813, centrally located openings in stove top plates such as in DE0010037813 and JP60-144530 are capable of being configured for use with a suction hood for allowing for the extraction of cooking gases, in the manner broadly set forth in applicant's claims.

**Claims Rejected under 35 U.S.C. 103(a)**

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP11-46992 (newly cited) in view of US006182472 (Fredholm et al; Assignee Eurokera), JP60-144530 (newly cited), DE0010037813 (newly cited) and DE0019838214 (newly cited).

DE0019838214 teaches, from applicant's same glass-ceramic stove top field of endeavor, providing a ventilation opening fixture with a seal for the purpose of providing a suitable fluid tight fitting therebetween.

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In regard to claims 19 and 20, for the purpose of for the purpose of providing a suitable or desired shaped according to a given stove top operation or aesthetic design parameters, it would have been obvious to a person having ordinary skill in the art to form the stove top of JP11-46992 with an opening having complex or “arbitrary” shape, in view of the teaching of US006182472 (Fredholm et al), and in view of the teaching of JP60-144530 an angular or polygon shape. Furthermore, it would have been obvious to a person having ordinary skill in the art to form the entire stove top plate of JP11-46992 from a single glass-ceramic material, in view of the teaching of US006182472 (Fredholm et al) or DE0010037813. In regard to claim 12, in particular, the porous member (15) of JP11-46992, shown as an intermeshed fibrous porous member, is deemed the structural and functional equivalent to applicant’s broadly claimed mesh element. And, for the purpose of providing a suitable fluid tight fitting, it would have been obvious to a person having ordinary skill in the art to modify the ventilation opening of JP11-46992 to include a seal, in view of the teaching of DE0019838214. In regard to claim 20, since the material selected for a seal would necessarily depend on numerous design concerns such as the desired degree of sealing, the temperature of the surfaces sealed, etc., to form the seal form a “fibrous” material can be viewed as nothing more than merely a matter of choice in design absent the showing of any new or unexpected results produced therefrom over the prior art of record.

### Conclusion

See the attached USPTO for, 892 for prior art made of record and not relied upon which is considered pertinent to applicant's disclosure.

### THIS ACTION IS MADE FINAL

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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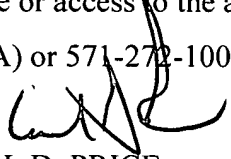
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**USPTO CUSTOMER CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is (571) 272-4880. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Josiah Cocks can be reached on (571) 272-4874. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
CARL D. PRICE  
Primary Examiner  
Art Unit 3749

CP